

BHJICHBINH

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS PO. Box 1459

P.O. Box 1450 Alexandria, Vinginia 22313-1450 www.uspin.gov

FILING OR 371 **ART UNIT** FIL FEE REC'D ATTY.DOCKET NO DRAWINGS TOT CLMS IND CLMS APPL NO. (c) DATE 58 10/726,386 12/02/2003 1614 6106 √2003080-0143 (SK-744-CON9 76 24

CONFIRMATION NO. 5603

FILING RECEIPT

OC00000013794623

Date Mailed: 09/14/2004

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Filing Receipt Corrections, facsimile number 703-746-9195. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

24280

Choate, Hall & Stewart

Exchange Place

53 State Street Boston, MA 02109

Samuel J. Danishefsky, Englewood, NJ;
Peter Bertinato, Old Lyme, CT;
Dai-Shi Su, New York, NY;

Dang Feng Meng, New York, NY;
Ting-Chao Chou, Paramus, NJ;
Ted Kamenecka, New York, NY;
Erik J. Sorensen, San Diego, CA;
Aaron Balog, New York, NY;
Kenneth A. Savin, New York, NY;

Power of Attorney:

GORDON D. COPLEIN-19165
BERT J. LEWEN-19407
MICHAEL JON SWEEDLER-19937
PAUL FIELDS-20298
WILLIAM E. DUDINE JR.-20569

MARTIN E. GOLDSTEIN-20869 Henry Sternberg-22408

David Francescani–25159 S: Peter Ludwig–25351 Melvin Gamer–26272

Domestic Priority data as claimed by applicant

This application is a CON of 10/431,467 05/07/2003 ABN

Foreign Applications

SEP 17 2004
PATENT DEPARTMENT

If Required, Foreign Filing License Granted: 09/13/2004

The number of your priority application, to be used for filing abroad under the Paris Convention is, US10/726,386

Projected Publication Date: 12/23/2004

Non-Publication Request: No

Early Publication Request: No

Title

Synthesis of epothilones, intermediates thereto, analogues and uses thereof

Preliminary Class

514

LICENSE FOR FOREIGN FILING UNDER Title 35, United States Code, Section 184 Title 37, Code of Federal Regulations, 5.11 & 5.15

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Office of Export Administration, Department of Commerce (15 CFR 370.10 (j)); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

USPTO TO PROVIDE ELECTRONIC ACCESS TO CITED U.S. ATENT REFERENCES WITH OFFICE ACTIONS AND CEASE SUPPLYING PAPER COPIES

In support of its 21st Century Strategic Plan goal of increased patent e-Government, beginning in June 2004, the United States Patent and Trademark Office (Office or USPTO) will begin the phasein of its E-Patent Reference program and hence will: (1) provide downloading capability of the U.S. patents and U.S. patent application publications cited in Office actions via the E-Patent Reference feature of the Office's Patent Application Information Retrieval (PAIR) system; and (2) cease mailing paper copies of U.S. patents and U.S. patent application publications with Office actions (in applications and during reexamination proceedings) except for citations made during the international stage of an international application under the Patent Cooperation Treaty (PCT). In order to use the new E-Patent Reference feature applicants must: (1) obtain a digital certificate and software from the Office; (2) obtain a customer number from the Office; and (3) properly associate patent applications with the customer number. Alternatively, copies of all U.S. patents and patent application publications can be accessed without a digital certificate from the USPTO web site, from the USPTO Office of Public Records, and from commercial sources. The Office will continue the practice of supplying paper copies of foreign patent documents and nonpatent literature with Office actions. Paper copies of cited references will continue to be provided by the USPTO for international applications during the international stage.

Schedule

June 2004 TCs 1600, 1700, 2800 and 2900 July 2004 TCs 3600 and 3700 August 2004 TCs 2100 and 2600

All U.S. patents and U.S. patent application publications are available on the USPTO web site. However, a simple system for downloading the <u>cited</u> U.S. patents and patent application publications has been established for applicants, called the E-Patent Reference system. As E-Patent Reference and Private PAIR require participating applicants to have a customer number, retrieval software and a digital certificate, all applicants are strongly encouraged to contact the Patent Electronic Business Center to acquire these items. To be ready to use this system by June 1, 2004, contact the Patent EBC as soon as possible by phone at 866-217-9197 (toll-free), 703-305-3028 or 703-308-6845 or electronically via the Internet at <u>ebc@uspto.gov</u>.

Other Options

The E-Patent Reference function requires the applicant to use the secure Private PAIR system, which establishes confidential communications with the applicant. Applicants using this facility must receive a digital certificate, as described above. Other options for obtaining patents which do not require the digital certificate include the USPTO's free Patents on the Web program (http://www.uspto.gov/patft/index.html). The USPTO's Office of Public Records also supplies copies of patents for a fee (http://ebiz1.uspto.gov/oems25p/index.html). Commercial sources also provide U.S. patents and patent application publications.

For complete instructions see the Official Gazette Notice, USPTO TO PROVIDE ELECTRONIC ACCESS TO CITED U.S. PATENT REFERENCES WITH OFFICE ACTIONS AND CEASE SUPPLYING PAPER COPIES, on the / USPTO web site.





ATTORNEY'S DOCKET NUMBER: 2003080-0143 (SK-744-CON9)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Danishefsky et al.

Examiner: Not Yet Assigned

Serial No.:

10/726,386

Group Art Unit: 1614

Filed:

December 2, 2003

For:

Synthesis of Epothilones, Intermediates Thereto, Analogues and Uses Thereof

COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

TRANSMITTAL

Enclosed please find the following:

- 1. Petition to Correct Filing Receipt (2 pages);
- 2. Copy of Application Transmittal Letter (5 pages);
- 3. Copy of Notice Regarding Power of Attorney (1 page);
- 4. Marked-up copy of Filing Receipt (3 pages); and
- 5. Return Postcard.

Please charge any fees associated with this filing, or apply any credits, to our Deposit Account No. 03-1721.

Respectfully submitted,

C. Hunter Baker, M.D., Ph.D.

Reg. No.: 46,533

CHOATE, HALL & STEWART

Exchange Place 53 State Street Boston, MA 02109 (617) 248-5000

Dated: September 27, 2004

Certificaté of Mailing

I certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

September 27, 2004

Date

Signature

Kenneth R. Maben

Typed or Printed Name of person signing certificate



CHOATE, HALL & STEWART

A PARTNERSHIP INCLUDING PROFESSIONAL CORPORATIONS

EXCHANGE PLACE

53 STATE STREET

BOSTON, MASSACHUSETTS 02109-2804

TELEPHONE (617) 248-5000 • FAX (617) 248-4000

WWW.CHOATE.COM

Mail Stop Patent Application Commissioner for Patents P.O. Box 1450

Alexandria, VA 22313-1450

Express Mail No.: EV 314103476 US

Attorney's Docket No.: 2003080-0143 (SK-744-CON9)

Date Filed: December 2, 2003

UTILITY PATENT APPLICATION TRANSMITTAL

(FOR NEW NONPROVISIONAL APPLICATIONS UNDER 37 C.F.R. § 1.53(B))

Dear Sir:

Please find enclosed a patent application and papers as follows for:

Inventor(s):

Given Name (first and middle)	Family Name or Surname	Residence (City and State or Foreign Country)
Samuel J.	Danishefsky	Englewood, NJ
Peter	Bertinato	Old Lyme, CT
Dai-Shi	Su	New York, NY
Dongfang	Meng	New York, NY
Ting-Chao	Chou	Paramus, NJ
Ted	Kamenecka	New York, NY
Erik J.	Sorensen	San Diego, CA
Aaron	Balog	New York, NY
Kenneth A.	Savin	New York, NY

<u>Title of the Invention</u>: Synthesis of Epothilones, Intermediates Thereto, Analogues and Uses Thereof

1) Kee Transmittal Form	n (original and duplicate s	submitted for fee processing)		
2) Applicant Claims Sm	all Entity Status (see 37 C	CFR § 1.27)		
a) 🗌 Stateme	ent Verifying Small Entity S	Status (optional)		
3) Specification		TAL PAGES: 112 cription; 24 pp. claims; 1 pg. abstract)		
□ Descriptive	e Title of the Invention			
☐ Reference	Reference to sequence listing, a table, or a computer program listing appendix			
Backgroun Backgro	□ Background of the Invention			
	Summary of the Invention			
□ Description	□ Description of the Drawing (if filed)			
	□ Detailed Description of the Invention			
,	☑ Claim(s)			
☐ Abstract o	f the Invention			
4) Drawing(s) (3	5 U.S.C. § 113)	TOTAL SHEETS: <u>59</u>		
a) 🛭 Formal	Drawings (if checked)	TOTAL SHEETS: 76		
5) 🛭 Oath or Decla	ration	TOTAL PAGES: 10		
a) \square Newly	Executed (original or copy)			
	rom a prior application (37 nuation/divisional applicati	* * * * * * * * * * * * * * * * * * * *		
i) 🗖]		gned Statement deleting inventor(s) named a 37 C.F.R. §§ 1.63(d)(2) and 1.33(b).		
c) 🗌 Unexec	uted			
6) 🗌 Application D	ata Sheet. See 37 C.F.R. §	1.76.		
7) CD-ROM or ((Appendix)	CD-R in duplicate, large to	able or Computer Program		

Express Mail No.: EV 314103476 US Date Filed: December 2, 2003

8) Nucleotide and/or	Amino Acid Sequence Sul	bmission (if applicable, all are necessary)
a) 🗌 Computer R	Readable Form (CRF)	
b) Specification	on Sequence Listing on:	
i) 🗌 CD-l	ROM or CD-R (2 copies); or	r
ii) 🗌 Pape	r	
c) Statements	verifying identity of above c	opies
B) ACCOMPANYING APPLIC.	ATION PARTS:	
9) 🛭 Assignment Pape	rs (cover sheet & document	(s))
10) 🔲 37 C.F.R. § 3.73(b) Statement (when there is	an assignee)
11) 🛛 Power of Attorne	Ey	
12) 🔲 English Translati	ion Document (if applicable	e)
13) 🛭 Information Disc	losure Statement (IDS)/PT	O-1449 (5 pp. total)
14) Copies of IDS Cit	tations	
15) 🛭 Preliminary Ame	endment (15 pp.)	•
16) 🛛 Return Receipt P	ostcard (MPEP 503) (spec	ifically itemized)
17) Certified Copy of	f Priority Document(s) (if f	oreign priority is claimed)
18) 🛛 OTHER: (if appl	icable, specified below)	
Identificati	on of Patent Under 37 CF	R §1.607(c) (1 pg.)
C) FOR CONTINUING APPI information is provided below and	LICATIONS: (the appropriation of the line) LICATIONS in a preliminary amendment	iate box is checked, and certain
	☐ divisional	☐ continuation-in-part (CIP)
of prior application no.:	10/431,467	
filed:	May 7, 2003	
examiner:	T. Solola	
group/art unit:	1626	
		ILY: The entire disclosure of the

prior application, from which an oath or declaration is supplied as detailed above, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference.

Express Mail No.: EV 314103476 US Date Filed: December 2, 2003

D.) PRIORITY CLAIM(S):

This application claims the benefit under 35 U.S.C. § 120 of any United States application(s) or PCT international application(s) designating the United States of America listed below:

Application Serial No.	Filing date	Status (patented, pending, abandoned)
08/986,025	December 3, 1997	Patented
09/691,615	October 18, 2000	Patented
09/662,426	September 13, 2000	Patented
09/686,158	October 11, 2000	Patented
09/808,451	March 31, 2001	Patented
09/874,514	June 5, 2001	Pending
10/004,571	December 4, 2001	Pending
10/058,695	January 28, 2002	Pending
10/374,805	February 25, 2003	Pending
10/431,467	May 7, 2003	Pending
10/695,582	October 28, 2003	Pending

This application claims the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below:

Filing date	Status (pending, expired, abandoned)
December 3, 1996	Expired
January 14, 1997	Expired
May 22, 1997	Expired
May 29, 1997	Expired
August 13, 1997	Expired
	December 3, 1996 January 14, 1997 May 22, 1997 May 29, 1997

E) METHOD OF PAYMENT OF FILING FEES FOR THIS APPLICATION:

- ☐ Applicant claims small entity status 37 C.F.R. § 1.27.
- A check is enclosed to cover the filing fees.
- ☑ The commissioner is hereby authorized to charge filing fees or to credit any overpayment to deposit account number 03-1721.

Express Mail No.: EV 314103476 US Date Filed: December 2, 2003

F) CORRESPONDENCE ADDRESS:

Patent Department

Attn: C. Hunter Baker, M.D., Ph.D.

Choate, Hall & Stewart

53 State Street Exchange Place Boston, MA 02109 phone: (617) 248-5000 fax: (617) 248-4000

Respectfully Submitted,

C. Hunter Baker, M.D., Ph.D.

Reg. No.: 46,533

CHOATE, HALL & STEWART

53 State Street Exchange Place Boston, MA 02109

CEDTIFICA	THE O	PEVED	DOC NO	ATT	TRIC
CERTIFICA	JE U	r expr	E22 M	AII.	JING

"Express Mail" mailing label number EV 314103374 US; Date of Deposit: December 23, 2003

I hereby certify that this correspondence is being deposited with the United States Postal Service as "Express Mail Post Office to Address" service under 37 CFR 1.10 on the date indicated above and is addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

December 2, 2003

Date

Signatur

Linda M. Amato

Typed or Printed Name of person signing certificate

Express Mail No.: EV 314103476 US Date Filed: December 2, 2003